

APPENDIX A
"CLEAN" VERSION OF EACH PARAGRAPH/SECTION/CLAIM
37 C.F.R. § 1.121(b)(ii) AND (c)(i)

CLAIMS (with indication of amended or new):

AMENDED

SUB
C1

1. A field-effect semiconductor device comprising:

- a channel layer;
- a contact layer;
- a semiconductor structure having an electron-affinity different from those of the channel layer and the contact layer and formed between the channel layer and the contact layer, the semiconductor structure having a first junction face between the semiconductor structure and the channel layer and having a second junction face between the semiconductor structure and the contact layer;
- an ohmic electrode formed on the contact layer; and
- a Schottky electrode formed on the semiconductor structure;

wherein the first junction face between the channel layer and the semiconductor structure and the second junction face between the contact layer and the semiconductor structure are iso-type heterojunctions; the channel layer and the semiconductor structure at the first junction face are each formed of doped layers; the contact layer and the semiconductor structure at the second junction face are each formed of doped layers; and the semiconductor structure includes an undoped layer intermediate the doped layers thereof.

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AMENDED

2. A field-effect semiconductor device according to claim 1, wherein the channel layer and the doped layer of the semiconductor structure at the first junction face are each n-type doped layers, and the contact layer and the doped layer of the semiconductor structure at the second junction face are each n-type doped layers.

NEW

11. A field-effect semiconductor device comprising:

a channel layer;

a contact layer;

a semiconductor structure having an electron-affinity different from those of the channel layer and the contact layer and formed between the channel layer and the contact layer, the semiconductor structure having a first junction face between the semiconductor structure and the channel layer and having a second junction face between the semiconductor structure and the contact layer;

an ohmic electrode formed on the contact layer; and

a Schottky electrode formed on the semiconductor structure;

wherein the first junction face between the channel layer and the semiconductor structure and the second junction face between the contact layer and the semiconductor structure are iso-type heterojunctions; the channel layer and the semiconductor structure at the first junction face are each formed of doped layers; the contact layer and the semiconductor structure at the second junction face are each formed of doped layers; the semiconductor structure includes an undoped layer intermediate the doped layers thereof; and the Schottky electrode is in contact with the undoped layer.

NEW

12. A field-effect semiconductor device according to claim 11, wherein the channel layer and the doped layer of the semiconductor structure at the first junction face are each n-type doped layers, and the contact layer and the doped layer of the semiconductor structure at the second junction face are each n-type doped layers.

APPENDIX B
VERSION WITH MARKINGS TO SHOW CHANGES MADE
37 C.F.R. § 1.121(b)(iii) AND (c)(ii)

CLAIMS:

1. A field-effect semiconductor device comprising:

a channel layer;

a contact layer;

a semiconductor structure having an electron-affinity different from those of the channel layer and the contact layer and formed between the channel layer and the contact layer, the semiconductor structure having a first junction face between the semiconductor structure and the channel layer and having a second junction face between the semiconductor structure and the contact layer;

an ohmic electrode formed on the contact layer; and

a Schottky electrode formed on the semiconductor structure;

wherein the first junction face between the channel layer and the semiconductor structure and the second junction face between the contact layer and the semiconductor structure are iso-type heterojunctions; the channel layer and the semiconductor structure at the first junction face are each formed of doped layers; the contact layer and the semiconductor structure at the second junction face are each formed of doped layers; and the semiconductor structure includes an undoped layer intermediate the doped layers thereof.

2. A field-effect semiconductor device according to claim 1, wherein the channel layer and the doped layer of the semiconductor structure at the first junction face are each [formed of] n-type doped layers, and the contact layer and the doped layer of the semiconductor structure at the second junction face are each [formed of] n-type doped layers.